REMARKS

Claims 1-23 are pending in this application. Claims 1, 2, 11, and 12 have been amended to define still more clearly what Applicant regards as his invention. Claims 1, 11-13, 22, and 23 are independent.

Applicant notes with appreciation the allowance of Claims 13-23.

Claims 1-12 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Regarding Claim 1, the Office Action states that the recitation of "encoding means for encoding the input motion data by selected encoding parameter" is considered vague and indefinite.

The encoding means encodes the input motion-image data using the selected first or second encoding parameter, that is, either the first encoding parameter output from control means or the second encoding parameter stored in storage means. The first encoding parameter is outputted such that an amount of code provided when the input motion-image data is encoded in units of predetermined sizes is a predetermined amount of code.

Applicant respectfully requests withdrawal of the rejection of Claims 1-12 under Section 112, second paragraph.

Claims 1-3, 5, 6, and 9-12 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,426,463 to Reininger et al. Claims 4 and 7 were rejected under 35 U.S.C. § 103(a) as being obvious from Reininger et al. in view of U.S. Patent 6,111,609 to Stevens; and Claim 8, as being obvious from Reinenger et al. in view of U.S. Patent 5,608,654 to Matsunoshita.

The present invention is directed to improvements in encoding techniques. As explained in more detail in the present application, such encoding techniques encode, for example, digital motion images input from a camera. In such encoding, problems can arise in the length of time required to encode an image, or in the quality of the image (for example, if non-uniform frames are generated).

Claim 1 is directed to an image encoding apparatus, including input means for inputting motion-image data, as well as control means, storage means, selecting means, and ancoding means. The control means outputs a first encoding parameter such that an amount of code provided when the input motion-image data is encoded in units of predetermined sizes is a predetermined amount of code. The storage means stores a second encoding parameter. The selecting means selects either the first encoding parameter output from the control means or the second encoding parameter stored in the storage means. The encoding means encodes the input motion-image data using the selected first or second encoding parameter.

Among other important features of Claim 1 are selecting either a first encoding parameter output from control means or a second encoding parameter stored in storage means, and encoding input-motion image data using the selected first or second encoding parameter.

Reininger et al., as understood by Applicant, relates to an apparatus for controlling quantizing in a video signal compressor. A quantizer is included for quantizing partially compressed video data and an apparatus is included for monitoring the amount of compressed output data. Depending upon the amount of compressed output data being lesser to or greater than a predetermined value, the quantizer is conditioned to operate in a

fixed quantization mode, or in a mode wherein only selected blocks of data in respective frames are adaptively quantized, respectively.

At page 4 of the Office Action, the Examiner states the following regarding Reininger et al., in connection with the claimed selecting means:

> [T]he selection of the quantization factors
> mentioned in col. 4 line 11 and lines 27-50
> (note the different quantization factor is
> selected for encoding different type of frame
> namely I/P/B frames and these quantization
> factors are stored in the look-up tables shown
> in figures 4-6).

Applicant submits that even if Reinenger et al. discusses that a different quantization factor is selected for encoding different types of frames, namely I/P/B frames, and these quantization factors are stored in the look-up tables shown in Figs. 4-6 of Reininger et al., that patent nevertheless fails to teach or suggest selecting either a first encoding parameter output from control means or a second encoding parameter stored in storage means, and encoding motion-image data using the selected first or second encoding parameter, as recited in Claim 1. By virtue of the features of Claim 1, it is possible to encode a motion image in real time with the most suitable number of codes which produce a uniform image quality.

For at least these reasons, Claim 1 is believed to be clearly allowable over Reininger et al.

Independent Claims 11 and 12 method and storage medium claims, respectively, corresponding to Claim 1, and are believed to be patentable for at least the same reasons as discussed above in connection with Claim 1.
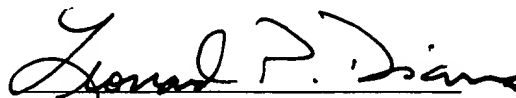
A review of the other art of record has failed to reveal anything which, in Applicant's opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

Leonard P. Diana
Attorney for Applicant
Registration No. 29,296

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200